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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/821,737 | 04/09/2004 | Jochen Schweinbenz | 10191/3610 | 1521 |
| 26646 | 7590 | 08/10/2005 | EXAMINER | |
| KENYON & KENYON ONE BROADWAY NEW YORK, NY 10004 | | | PAPE, ZACHARY | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2835 | |

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/821,737

Applicant(s)

SCHWEINBENZ ET AL.

Examiner

Zachary M. Pape

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/9/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Housing for cooling electronic control units in motor vehicles"

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. **Therefore, the threaded connectors of claim 8; the motor vehicle of claim 2, the separate cooling channels of claim 9, and the cross hole of claim 10; must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.**

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1, 3-12 rejected under 35 U.S.C. 102(b) as being clearly anticipated by Clamp et al. (US 6,302,190).

With respect to claim 1, Clamp et al. teaches a housing for electronic control units comprising: a bottom section (32,34) for attaching the electronic control units (20); and a cooling device (30) for enabling heat to be dissipated from the housing via a liquid flowing there-through, the cooling device being situated in the bottom section (Column 2, Lines 35-39).

With respect to claim 3, Clamp further teaches that the bottom section (32,34) includes a cooling plate (30).

With respect to claim 4, Clamp et al. further teaches that the cooling plate has at least one integrated cooling channel (Wherein the channel begins at 46 and ends at 48; as illustrated in Fig 7).

With respect to claim 5, Clamp et al. further teaches sectional members (52) for conducting heat and reinforcing the bottom section (30) are situated on an outside of the cooling channel (As illustrated in Fig 6).

With respect to claim 6, Clamp et al. further teaches that the cooling channel passes through the bottom section in a linear manner (As illustrated in Fig 2 numeral 40).

With respect to claim 7, Clamp et al. further teaches that the cooling channel has a round cross-section (As illustrated in Fig 2, 46 and 48 both have round cross sections).

With respect to claim 8, Clamp et al. further illustrates in Fig 9 an inlet of the cooling channel (94) and an outlet of the cooling channel (102) have threaded connectors leading into and out of the bottom section.

With respect to claim 9, Clamp et al. further teaches that the cooling plate has separate cooling channels (As illustrated in Fig 2, the first cooling channel is located near 40 and the second, separate cooling channel is located near 44).

With respect to claim 10, Clamp et al further illustrates that the separate cooling channels are connected by at least one separate cross hole (Running along the left side of the bottom (32/34)).

With respect to claims 11 and 12, the limitations of the claims have not been given patentable weight because the claims contain only limitations pertaining to the method of making the device. Even though the claims are limited and defined by the recited process, the determination of patentability of the product is based on the product

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itself, and does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clamp et al. in view of Xu et al. (US 6,742,326).

With respect to claim 2, Clamp et al. teaches that the electronic control unit is mounted on an engine (Column 2, Lines 54-55), but fails to specifically teach that the engine is mounted in a vehicle. Xu et al. teaches the conventionality of mounting an engine in a vehicle (Column 3, Lines 62-63). It would have been obvious to one of ordinary skill in the art at the time the invention was made to mount the engine of Clamp et al. into a vehicle as taught by Xu et al. to provide a means of propelling a vehicle.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6,442,023; US 6,166,907; US 5,159,529; and D E 2,823,666 all further teach liquid cooling of components.

US 6,536,516; and US 6,434,003 further teach threaded connectors.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary M. Pape whose telephone number is 571-272-2201. The examiner can normally be reached on Mon. - Thur. & every other Fri. (8:00am - 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ZMP


ANATOLY VORTMAN
PRIMARY EXAMINER